

B1
the x-ray mirror emanates an X-ray having a peaked wavelength in a range from 0.45 nm to 0.7 nm.

B2
C1
16. (Twice Amended) An X-ray mirror containing one type of material for mirror (selected from the group consisting of titanium, silver, and nitride thereof, a carbide thereof, a boride thereof, diamond, diamond-like carbon, and boron nitride, and said X-ray mirror provides light at least having a component in wavelength ranging from 0.45nm through 0.7 nm.

B3
24. (Twice Amended) An X-ray exposure method comprising:
an X-ray incidence step of making X-rays incident upon an X-ray mirror containing a material having an absorption edge only in a wavelength region other than 0.45 nm through 0.7 nm as to X-rays; and
an exposure step of performing exposure with X-rays outgoing from said X-ray mirror and at least having a component in wavelength ranging from 0.45 nm through 0.7 nm, and the x-ray mirror emanates an X-ray having a peaked wavelength in a range from 0.45 nm to 0.7 nm.

B4
40. (Twice Amended) A synchrotron radiation apparatus comprising a synchrotron radiation source and an X-ray mirror group including a plurality of X-ray mirrors upon which radiation outgoing from said synchrotron radiation source is incident, wherein said X-ray mirrors contain a material having an absorption edge only in a wavelength region other than 0.45 nm through 0.7 nm as to X-rays,

the outgoing direction of said radiation outgoing from said synchrotron radiation source and the outgoing direction of reflected light outgoing from said X-ray mirror group are substantially identical, and

said X-ray mirror provides light at least having a component in wavelength ranging from 0.45nm through 0.7 nm, and

the x-ray mirror emanates an X-ray having a peaked wavelength in a range from 0.45 nm to 0.7 nm.

42. (Twice Amended) A synchrotron radiation method employing a synchrotron radiation apparatus comprising a synchrotron radiation source and an X-ray mirror group including a plurality of X-ray mirrors upon which radiation outgoing from said synchrotron radiation source is incident, said synchrotron radiation method comprising:

a radiation incidence step of making radiation outgoing from the synchrotron radiation source incident upon an X-ray mirror containing a material having an absorption edge only in a wavelength region other than 0.45 nm through 0.7 nm as to X-rays, and

a reflected light emitting step of emitting reflected light from said X-ray mirror group in a direction substantially identical to the outgoing direction of the radiation outgoing from said synchrotron radiation source, said reflected light at least having a component in wavelength ranging from 0.45 nm through 0.7 nm, and

the x-ray mirror emanates an X-ray having a peaked wavelength in a range from 0.45 nm to 0.7 nm.